

1 - U.S. Patent Application No. 10/728,627 ~~(Attorney~~
2 ~~Docket No. TI-34654)~~, entitled APPARATUS AND METHOD FOR
3 SYNCHRONIZATION OF TRACE STREAMS FROM MULTIPLE PROCESSING
4 UNITS, invented by Gary L. Swoboda, filed on even date
5 herewith, and assigned to the assignee of the present
6 application; U.S. Patent Application No. 10/729,212
7 ~~(Attorney Docket No. TI-34655)~~, entitled APPARATUS AND
8 METHOD FOR SEPARATING DETECTION AND ASSERTION OF A TRIGGER
9 EVENT, invented by Gary L. Swoboda, filed on even date
10 herewith, and assigned to the assignee of the present
11 application; U.S. Patent Application No. 10/729,650
12 ~~(Attorney Docket No. TI-34657)~~, entitled APPARATUS AND
13 METHOD FOR SELECTING PROGRAM HALTS IN AN UNPROTECTED
14 PIPELINE AT NON-INTERRUPTIBLE POINTS IN CODE EXECUTION,
15 invented by Gary L. Swoboda, filed on even date herewith,
16 and assigned to the assignee of the present application;
17 U.S. Patent Application No. 10/729,591 ~~(Attorney Docket No.~~
18 ~~TI-34658)~~, entitled APPARATUS AND METHOD FOR REPORTING
19 PROGRAM HALTS IN AN UNPROTECTED PIPELINE AT NON-
20 INTERRUPTIBLE POINTS IN CODE EXECUTION, invented by Gary L.
21 Swoboda, filed on even date herewith, and assigned to the
22 assignee of the present application; U.S. Patent
23 Application No. 10/729,407 ~~(Attorney Docket No. TI-34659)~~,
24 entitled APPARATUS AND METHOD FOR A FLUSH PROCEDURE IN AN
25 INTERRUPTED TRACE STREAM, invented by Gary L. Swoboda,
26 filed on even date herewith, and assigned to the assignee
27 of the present application; U.S. Patent Application No.
28 10/729,564 ~~(Attorney Docket No. TI-34660)~~, entitled
29 APPARATUS AND METHOD FOR CAPTURING AN EVENT OR COMBINATION
30 OF EVENTS RESULTING IN A TRIGGER SIGNAL IN A TARGET

1 PROCESSOR, invented by Gary L. Swoboda, filed on even date
2 herewith, and assigned to the assignee of the present
3 application; U.S. Patent Application No. 10/729,400
4 ~~(Attorney Docket No. TI-34661)~~, entitled APPARATUS AND
5 METHOD FOR CAPTURING THE PROGRAM COUNTER ADDRESS ASSOCIATED
6 WITH A TRIGGER SIGNAL IN A TARGET PROCESSOR, invented by
7 Gary L. Swoboda, filed on even date herewith, and assigned
8 to the assignee of the present application; U.S. Patent
9 Application No. 10/729,592 ~~(Attorney Docket No. TI-34662)~~,
10 entitled APPARATUS AND METHOD DETECTING ADDRESS
11 CHARACTERISTICS FOR USE WITH A TRIGGER GENERATION UNIT IN A
12 TARGET PROCESSOR, invented by Gary L. Swoboda and Jason L.
13 Peck, filed on even date herewith, and assigned to the
14 assignee of the present application U.S. Patent Application
15 No. 10/729,639 ~~(Attorney Docket No. TI-34663)~~, entitled
16 APPARATUS AND METHOD FOR TRACE STREAM IDENTIFICATION OF A
17 PROCESSOR RESET, invented by Gary L. Swoboda and Bryan
18 Thome, filed on even date herewith, and assigned to the
19 assignee of the present application; U.S. Patent
20 Application No. 10/729,214591 ~~(Attorney Docket No. TI-~~
21 ~~34664)~~, entitled APPARATUS AND METHOD FOR TRACE STREAM
22 IDENTIFICATION OF A PROCESSOR DEBUG HALT, invented by Gary
23 L. Swoboda, Bryan Thome, Lewis Nardini, and Manisha
24 Agarwala, filed on even date herewith, and assigned to the
25 assignee of the present application; U.S. Patent
26 Application No. 10/729,327 ~~(Attorney Docket No. TI-34665)~~,
27 entitled APPARATUS AND METHOD FOR TRACE STREAM
28 IDENTIFICATION OF A PIPELINE FLATTENER PRIMARY CODE FLUSH
29 FOLLOWING INITIATION OF AN INTERRUPT SERVICE ROUTINE;
30 invented by Gary L. Swoboda and Bryan Thome, filed on even

1 date herewith, and assigned to the assignee of the present
2 application; U.S. Patent Application No. 10/729,647
3 ~~(Attorney Docket No. TI-34666)~~, entitled APPARATUS AND
4 METHOD FOR TRACE STREAM IDENTIFICATION OF A PIPELINE
5 FLATTENER SECONDARY CODE FLUSH FOLLOWING A RETURN TO
6 PRIMARY CODE EXECUTION, invented by Gary L. Swoboda and
7 Bryan Thome, filed on even date herewith, and assigned to
8 the assignee of the present application; U.S. Patent
9 Application No. 10/729,401 ~~(Docket No. TI-34667)~~, entitled
10 APPARATUS AND METHOD IDENTIFICATION OF A PRIMARY CODE START
11 SYNC POINT FOLLOWING A RETURN TO PRIMARY CODE EXECUTION,
12 invented by Gary L. Swoboda, filed on even date herewith,
13 and assigned to the assignee of the present application; U.
14 S. Patent Application No. 10/729,326 ~~(Attorney Docket No.~~
15 ~~TI-34668)~~, entitled APPARATUS AND METHOD FOR IDENTIFICATION
16 OF A NEW SECONDARY CODE START POINT FOLLOWING A RETURN FROM
17 A SECONDARY CODE EXECUTION, invented by Gary L. Swoboda,
18 filed on even date herewith, and assigned to the assignee
19 of the present application; U.S. Patent Application No.
20 10/729,190 ~~(Attorney Docket No. TI-34669)~~, entitled
21 APPARATUS AND METHOD FOR TRACE STREAM IDENTIFICATION OF A
22 PAUSE POINT IN A CODE EXECUTION SEQUENCE, invented by Gary
23 L. Swoboda, filed on even date herewith, and assigned to
24 the assignee of the present application; U.S. Patent
25 Application No. 10/729,196 ~~(Attorney Docket No. TI-34670)~~,
26 entitled APPARATUS AND METHOD FOR COMPRESSION OF A TIMING
27 TRACE STREAM, invented by Gary L. Swoboda and Bryan Thome,
28 filed on even date herewith, and assigned to the assignee
29 of the present application; U.S. Patent Application No.
30 10/729,272 ~~(Attorney Docket No. TI-34671)~~, entitled

1 APPARATUS AND METHOD FOR TRACE STREAM IDENTIFICATION OF
2 MULTIPLE TARGET PROCESSOR EVENTS, invented by Gary L.
3 Swoboda and Bryan Thome, filed on even date herewith, and
4 assigned to the assignee of the present application; and
5 U.S. Patent Application No. 10/729,191 (~~Attorney Docket No.~~
6 ~~TI-34672~~), entitled APPARATUS AND METHOD FOR OP CODE
7 EXTENSION IN PACKET GROUPS TRANSMITTED IN TRACE STREAMS,
8 invented by Gary L. Swoboda and Bryan Thome, filed on even
9 date herewith, and assigned to the assignee of the present
10 application are related applications.- -
11

12 **Please delete the Paragraph beginning on Line 12 of Page 10**
13 **and replace that Paragraph with the following Paragraph.**
14

15 - -A need has been felt for apparatus and an
16 associated method having the feature that selected trace
17 streams can be disabled. It would be a further feature of
18 the apparatus and associated method that selected trace
19 streams can be disabled during a halt in the program
20 execution. It would be yet a further feature of the
21 present apparatus and associated method that selected trace
22 streams can be disabled during an interrupt service
23 routine. It would be a more ~~amere~~ particular feature of
24 the apparatus and present invention to provide information
25 in the trace streams relating to the instructions stored in
26 the pipeline flattener during interruptions to the program
27 execution.- -

1 **Please delete the Paragraph beginning on Line 9 of Page 27**
2 **and replace that Paragraph with the following Paragraph.**

3
4 - -In order to accommodate the delay in access to the
5 memory unit, the instructions are routed through a pipeline
6 flattener. Therefore, during a code execution halt, the
7 pipeline flattener will contain instructions that are still
8 in the process of being executed. The program counter
9 address is delayed to accommodate the delay of the pipeline
10 and the delay of the pipeline flattener. The pipeline
11 flattener is ~~in~~ an unprotected pipeline stalls along with
12 the pipeline when the code execution is halted. In a
13 protected pipeline continues to fill with nulls during a
14 code execution halt, thereby expelling the instructions
15 entered in the primary or second code execution state.
16 Although the pipeline flattener expedites the separation of
17 the primary and secondary code execution states, the
18 pipeline flattener is not required for instruction
19 alignment. Tags can be separately associated with program
20 counter values, read activity, and write activity,
21 obviating the need for the pipeline flattener.- -

22
23 **Please delete the Paragraph beginning on Line 23 of Page 28**
24 **and replace that Paragraph with the following Paragraph.**

25
26 - -In the testing of a target processor, large amounts
27 of information need to be transferred from the target
28 processor to the host processing unit. Because of the
29 large amount of data to be transferred within a limited
30 bandwidth, every effort is provided to eliminate

1 unnecessary ~~necessary~~ information transfer. For example,
2 the program counter trace stream, when the program is
3 executed in a straight-forward manner and the sync ID
4 markers are not present, would consist only of a first and
5 last sync point marker.- -